

REMARKS

The present communication responds to the Office Action dated November 16, 2006. In that Office Action, the Examiner rejected Claims 29-37 under 35 U.S.C. § 103(a). Applicant has hereby amended Claims 29 and 34. No new matter has been added by these amendments. In view of the amendments and the following remarks, Applicant requests entry and reconsideration, and allowance of the pending claims.

Rejections Under 35 U.S.C. § 103

Claims 29 and 34 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Lee (U.S. Patent 5,292,332) in view of Clark (U.S. Patent 5,259,835). Applicant traverses the rejection for at least the following reasons.

Claim 29, as amended, is directed to a lumen occlusion device. The lumen occlusion device comprises, in part, “a plug defining a plurality of openings, the plug being configured and dimensioned to occlude flow through the lumen” and further comprises, in part, “a biological bonding agent for being moved through the openings.”

Neither Lee nor Clark, alone or in combination, disclose, teach, or suggest the invention of claim 29. As the Examiner points out, Lee fails to disclose, teach, or suggest a plug having a plurality of openings or a biological bonding agent for being moved through the openings. Lee further fails to disclose, teach, or suggest a plug “configured and dimensioned to occlude flow through the lumen.” Rather, Lee discloses a method and device for closing a puncture in an artery wall. *Lee, Abstract*. In one embodiment, Lee discloses a screw-plug for threading into a puncture site of an arterial wall, which resulted from an arterial sheath used during an intravascular procedure. *Lee, Col. 3, ll. 40-Col. 5, ll. 66*. In a further embodiment, Lee discloses a plug member that may be disposed on the outside arterial wall to close a puncture site, which resulted from an arterial sheath used during an intravascular procedure. *Lee, Col. 5, ll. 67-Col. 7, ll. 18*. In either embodiment, the plug becomes part of the arterial wall. Lee nowhere discloses that flow through the artery is occluded. Furthermore, contrary to the Examiner’s assertion in the present office action, Lee teaches away from occluding flow through the artery since the stated objective in Lee is obtained by providing a method for closing a puncture in a wall of an

artery to seal the artery wall. *Lee, Col. 2, ll. 11-13.* *Lee*, in fact, explains that the disclosure is directed toward a medical device for percutaneously sealing a puncture in an artery without impeding blood flow within the lumen. *Lee, Ccol. 1, ll. 8-12.* From the disclosure, it is clear that the device disclosed in *Lee* is not a lumen occlusion device. Therefore, *Lee* does not disclose, teach, or suggest a lumen occlusion device comprising “a plug defining a plurality of openings, the plug being configured and dimensioned to occlude flow through the lumen.”

Clark fails to remedy the deficiencies of *Lee* as a reference. Clark discloses an external wound closure device employing a porous bonding member which receives a flowable adhesive for adhering the bonding member to the skin of the patient. *Clark, Abstract.* Particularly, Clark discloses a device for apposing the edges of an external wound. *Id.* Clark does not disclose subject matter having any relation to lumen occlusion. As such, Clark does not disclose, teach, or suggest a lumen occlusion device comprising “a plug defining a plurality of openings, the plug being configured and dimensioned to occlude flow through the lumen.” Clark merely discloses a particular embodiment of adhesive bandages for closing external skin wounds. The mere fact that Clark discloses a flowable adhesive does not provide the incentive to combine Clark under § 103 with any other reference.

Thus, for at least the preceding reasons, neither *Lee* nor Clark, alone or in combination, disclose, teach, or suggest the invention of Claim 29. Accordingly, reconsideration and withdrawal of the rejection is requested.

Claim 34, as amended, is directed to a method of occluding a body lumen. The method comprises, in part, “providing a device comprising a plugging means adapted for occluding flow through the body lumen . . . , wherein the plugging means has a plurality of openings” and further comprises, in part, “conveying the biphasic material to the plugging means; moving said biphasic material through the openings of said plugging means to fix said plugging means relative to the interior wall of said body lumen.”

Neither *Lee* nor Clark, alone or in combination, disclose, teach, or suggest the invention of claim 34. As discussed above, *Lee* discloses a method and device for closing a puncture in an artery wall and, in fact, teaches away from occluding flow through the body lumen. *Lee,*

Abstract; Col. 1, ll. 8-12. Clark discloses an external wound closure device employing a porous bonding member which receives a flowable adhesive for adhering the bonding member to the skin of the patient. *Clark, Abstract.* That is, Clark merely discloses a particular embodiment of adhesive bandages for closing external skin wounds. Neither Lee nor Clark disclose, teach, or suggest a method of occluding a body lumen comprising “providing a device comprising a plugging means adapted for occluding flow through the body lumen . . . , wherein the plugging means has a plurality of openings.”

For at least these reasons, neither Lee nor Clark, alone or in combination, disclose, teach, or suggest the invention of Claim 34. Accordingly, reconsideration and withdrawal of the rejection is requested.

Claims 30-33 and 35-37 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Lee and Clark, as applied to Claims 29 and 34 above, and further in view of Wallace (U.S. Patent 6,585,754). Applicant traverses the rejection for at least the following reasons.

As discussed above, neither Claim 29, from which Claims 30-33 depend, or Claim 34, from which Claims 35-37 depend, are made obvious by the asserted Lee/Clark combination.

Wallace fails to remedy the deficiencies of the Lee/Clark combination. Wallace discloses compositions comprising absorbable implantable vaso-occlusive members. *Wallace, Abstract.* Wallace discloses an indirect method of lumen occlusion, i.e., embolization. Wallace does not disclose, teach, or suggest a lumen occlusion device comprising “a plug defining a plurality of openings, the plug being configured and dimensioned to occlude flow through the lumen” nor “a biological bonding agent for being moved through the openings,” as recited in claim 29. Wallace further does not disclose, teach, or suggest a method of occluding a body lumen comprising “providing a device comprising a plugging means adapted for occluding flow through the body lumen . . . , wherein the plugging means has a plurality of openings.” nor “conveying the biphasic material to the plugging means; moving said biphasic material through the openings of said plugging means to fix said plugging means relative to the interior wall of said body lumen,” as recited in claim 34.

Furthermore, there is no teaching, suggestion, or motivation to make the combination asserted by the Examiner. The mere fact that the implantable vaso-occlusive member in Wallace is made of absorbable material does not provide the incentive to combine with another reference solely to add absorbable material to the list of compositions in the other reference.

For at least these reasons, Lee, Clark, and Wallace, either alone or in combination, do not disclose, teach, or suggest the invention of Claims 30-33 and 35-37. Accordingly, reconsideration and withdrawal of the rejection are requested.

CONCLUSION

This response is being submitted on or before March 16, 2007, with the required fee for a one-month extension of time, making this a timely response. It is believe that no additional fees are due in connection with this filing. However, the Commissioner is authorized to charge any additional fees, including extension fees or other relief which may be required, or credit any overpayment, to Deposit Account No. 04-1420.

This application now stands in allowable form, and reconsideration and allowance are requested.

Respectfully submitted,

DORSEY & WHITNEY LLP
Customer Number 25763

Date:

Feb 22, 2007

By:

David E. Bruhn
David E. Bruhn, Reg. No. 36,762
(612) 340-6317